

LOTUS NOTES TO MICROSOFT OUTLOOK/EXCHANGE CONVERSIONS With Transend Migrator Standard and Forensic Editions

OVERVIEW

Transend® Migrator is a client-based utility for converting the following Lotus Notes data to Microsoft Outlook/Exchange:

- Messages/Folders
- Local Archives
- Address Books
- Calendars
- Tasks / To-Do Items

Notes versions 4, 5, 6 7 and 8 are supported. All versions of Outlook/Exchange are supported. Both the Notes and Outlook clients need to be installed on the PC running Transend Migrator, which can be installed on a network drive or the end user's PC. Optionally, or if the Outlook client is not present, an intermediate file format called Transport File can be used in a two-step process.

Transend Migrator typically is run from the end user's PC, but can also be run for multiple users from a central location (see below). Transend Migrator includes both a graphical Windows interface with easy to follow wizard-like instructions as well as a powerful command line batch mode processor.

REQUIREMENTS

Minimum Requirements

- Windows 98 through Windows Vista with current service packs
- 16 MB RAM (in addition to operating system requirements)
- Enough disk space to store converted files
- Exchange/Outlook: MAPI32.DLL and associated DLLs
- Notes: Client 4.5 or greater

Recommended System Requirements

- Windows XP or Vista with current Service Packs
- Pentium 4, 1.7GHz, system or greater
- 512MB RAM or greater

To install Transend Migrator, run the install file i.e. TM61inst.msi (the file name may change to correspond with the version number). You may select the install directory, and optionally create a program group for the main executable TM.EXE.

All documentation is provided via a Windows Help file. You can invoke the help system by running TM.EXE and pressing the HELP button.

The setup program will copy files required by all conversion types. For a smaller installation, you may remove DLL files that are not required by the type of conversion you are doing.

MESSAGE/FOLDER AND ARCHIVE CONVERSION

Messages and archives are converted from a local .nsf file or the Domino server. The Notes folder structure is maintained in Outlook (in either the Exchange server mailbox or a .pst file). All message properties are maintained, including: to/from addresses, cc and bcc fields, dates, message priority and subject. Attachments are converted and maintained with the migrated messages or can be detached from the message and copied to a specified directory. Addresses can be converted to a format that is reliable through Exchange based on a specified name conversion rule.

ADDRESS BOOK CONVERSION

Transend Migrator converts the user's Notes address book (names.nsf), including personal addresses and distribution lists, to the Outlook Contacts. You may optionally specify an email address conversion rule. All data from the Notes address book is converted, including: name, email address, comments, location, department, manager, company name, title, suffix, job title, spouse, children, assistant, pager, office phone, office fax, home phone number, home fax, cell phone, birthday, office address, home address.

CALENDAR AND TO-DO CONVERSION

The user's Notes calendar is converted to the Outlook calendar. Transend Migrator gets all Notes appointment types: anniversary, all day, meeting, and reminder. It also converts the To-Do list. Reoccurring entries are supported, but expanded to multiple entries in Outlook. Data fields retrieved are Subject, Location, Room, StartDateTime, EndDateTime, Importance, DueDate, AppointmentType, SentTo, RequiredAttendees, OptionalAttendees, comments, and attachments.

RUNNING TRANSEND MIGRATOR IN INTERACTIVE MODE (GUI)

When Transend Migrator starts, it displays the Conversion Type screen. This allows you to indicate which type of conversion you will be performing.

You may select:

- Message Folders
- Address Books
- Calendars
- Tasks

The logon screen for Lotus Notes asks you to enter values for the Notes user name, mail database, and password. Default values for both the user name and mail database should appear in these fields. This screen also contains a checkbox for "Shared Folders", which should be checked if you intend to access a shared Notes database.

If the Notes NSF file or account is protected by a username and password then the correct username and password must be used. By default, Transend Migrator will use the Notes ID and password associated with the Lotus Notes client. If an alternate ID file and password is required then switch to the correct account and password in Notes and then try another conversion. Alternately, type in the password, a semicolon, and the path and filename to the ID file in the password field (It will be easier to type the information into Notepad and then paste it into the password field). This is the same information used in the FromPassword keyword for batch mode. The syntax is as follows:

Syntax

```
<password>;<path and ID file>
```

For Example

```
Mypassword;C:\Notes\jsmith.id
```

In order to access Exchange or Outlook for the migrated data, you must have already installed the Exchange or Outlook client on your machine. In most cases Outlook will be accessed via a "profile". If you are using a profile, enter the name of the profile here. As an alternative to using predefined profiles, you can tell Transend Migrator to create a .pst file that you specify. If you are converting address book data, this screen will include the field "Contact Folder", where you may enter an alternate name of the folder containing your contacts if you are not using the standard default.

Convert Directly to Exchange without an Outlook profile

Another option, when converting to an Exchange Server, is to tell Transend Migrator to convert directly to an Exchange account without a profile. To do this, use the following syntax in the Profile or PST text box or in the ToDatabase = <value> keyword.

Syntax:

<servername or cluster name>!!<username>

For example:

EXCH02!!jsnuffy

The folder selection screen presents a list of all existing Notes folders (what you are converting from). Notes folders in a multi-level hierarchy (folders within folders) will be separated from higher levels by a slash. Single or multiple folders can be selected for conversion.

Prior to running the conversion, the following options can be set from the Miscellaneous Options screen:

Convert only those...: To convert only those messages that contain the given string. Leave this field blank to convert all messages.

Max Attachment Size: This field allows you to limit the size of attachments that are converted. If you want all attachments to pass, enter all 9's in this field. There is a command line switch that allows you to specify that deleted attachments will be copied to a directory.

Max Distribution List: Use this field to cut off a distribution list (to's and cc's) at a given number.

Oldest Message Date: This option allows you to convert only those messages that were created more recently than the given date. To convert all messages, enter a very old date (such as Jan 1, 1980, the default).

Message Store: This field appears only if you are converting to a system that supports multiple message stores, such as Exchange or Outlook. In that case, you may select the message store from the drop down list.

Name Conversion: For many conversions, the original email address of people on the distribution list will not make any sense in the new system. This field allows you to create an Internet style address based on a display name.

COMMAND OPTIONS

The following command line switches may be used when running the main GUI executable, TM.EXE, or the batch mode processor, TMB.EXE.

General Switch Options:

Work Directory: The work directory is where temporary files used during the conversion are kept. By default this is set to the Windows temp directory, usually C:\Documents and Settings*<profile>*\Local Settings\Temp. You may override this value by using the switch /D <directory>

System Directory: The system directory is where the Transend Migrator configuration file and log file are stored. By default this is set to the C:\Documents and Settings\All Users\Application Data\Transend directory. It may be overridden by using the switch /S <directory>

Enable Logging: Transend Migrator will log various events, including message conversion status, and various errors. By default no log file is produced. To enable logging, use the switch /L to create an appendable log file, or /LX to create a new log file each run. The file is called UALOG.TXT, and is stored in the C:\Documents and Settings\All Users\Application Data\Transend directory.

Enable Screen logging. /SL causes logging information to be sent to the display screen during batch mode processing. Alternately, use the /Progress switch option to see incremental message counts during processing.

No Config File Write: To prevent the configuration file UA.CFG from being written back to disk, use the switch /NCFG. This prevents your recent user options from being saved, but will prevent errors if your config file is not in a writable directory.

Character Conversion

Transend Migrator attempts to automatically determine what type of character set conversion is necessary for your migration by running text through the Windows facility for character conversion. However this process sometimes fails, so it may be necessary to select a different type of conversion. If you notice a problem with non-English character sets not displaying properly, ensure your operating system and Outlook is setup for the required language and try one of the following switch options with Transend Migrator after setting Windows to the required language:

Windows Vista

Windows Vista defaults to "Category View" in the control panel. Switch to "Classic View" for the following steps.

1. Go to the **Control Panel**
2. Double-click the **Regional and Language Options** icon
3. Select the **Administrative** tab
4. Select the **Change System Locale...** button and continue
5. Change the **Current System Locale** to match the language for programs that don't support Unicode
6. **Reboot** the computer

Windows XP

Windows XP defaults to "Category View" in the control panel. Switch to "Classic View" for the following steps.

1. Go to the **Control Panel**
2. Double-click the **Regional and Language Options** icon
3. Select the **Advanced** Tab
4. "Select a language to match the language version of the non-Unicode programs you want to use" from the **drop down selection box**
5. **Reboot** the computer

Windows 2000

1. Go to the **Control Panel**
2. Double-click **Regional Options**
3. Select **General**
4. Select **Language Settings for the System**
5. **Select the language** to use for your conversion.
6. **Click Apply** to complete the installation, and follow the prompts. You may need your Windows 2000 CD-ROM.
7. **Reboot** the computer

Microsoft Outlook

1. Select **Tools** from the menu
2. Select **Options**
3. Select the **Mail Format** tab
4. Select the **International Options** button
5. **Select the language** from the Preferred encoding for Outgoing Messages drop down selection window
6. **Click OK**
7. Close and **restart Outlook**

Character Conversion Options	
/CC2	Use Western European Character Set
/CC4	Same as CC but does not convert the subject since the subject may already be in the required character set.
/NOCC	Do not perform a character conversion
The following switches are used for converting the codepage 850 character set into Windows 1252. These command line switches are mainly used for Lotus Notes to Outlook conversions, and may not work for other source systems	
/CC	Alternative Western European Character Set
/CCA	Arabic Character Set
/CCC	Portuguese Character Set
/CCG	Greek Character Set
/CCI	Italian Character Set
/CCISO	Latin Character Set
/CCISO2	Eastern European Character Set
/CCJ	Asian Languages
/CCN	Nordic Languages i.e. Danish and Swedish
/CCP	Polish Character Set
/CCR	Russian Character Set
/CCT	Turkish Character Set
/CCZ	Czech Character Set
/CC3 <codepage>	The codepage can be found on: http://www.microsoft.com/globaldev/reference/WinCP.msp
The following switch is used for UTF-8 to codepage 850. Mainly used for Internet clients to Lotus Notes	
/CCW	Used for UTF-8 to codepage 850
/CC8	Used for UTF-8 to codepage 1252

Detach attachments: The user interface provides a method for restricting the size of attachments that are converted. This option allows you to extend this capability by specifying that such attachments are to be copied to a directory, as well as deleted from the message. Use the switch /DETACH, followed by a space, followed by the name of the directory to which attachments will be copied. Make sure to fill out the "Max Attachment Size" field in the user interface to specify which attachment will be copied.

Sent Mail Folder: When converting a source systems "Sent Mail" folder, you normally want the "To" entry to display in the "From" field, as the sender will always be the same (i.e. yourself). Use the /SENT switch to perform this reversal.

Distribution List: /DLIST inserts the distribution list into the message text.

GMT Offset: For calendar and email conversions, enter the number of minutes you want to adjust the time by using the switch /TZD, followed by a space, and followed by the value, positive or negative. You may also need to use the switch /DSTOFFSET to alter the number of minutes that Transend Migrator assumes is the difference between daylight and standard times (default is -60).

Interactive Mode: Use the switch /IM to force "Interactive mode" when running the batch processor. This causes some APIs (e.g. Outlook) to put up a dialog box if certain logon information is missing or invalid.

HTML: Use the /HTML switch to make sure HTML encoded messages are tagged correctly. You may also need to use the switch /DETECTHTML, which causes Transend Migrator to do additional processing when determining if a message is HTML encoded. If the above does not work, try the switch /HTMLATTACH, which causes HTML messages to be appended as attachments. You can then click on the attachment, which will cause the message to display properly via your browser.

Group Folder Name: When Transend Migrator creates the folder on the output system, it will be named "X Folders", where X is the name of your source system. To change this top level folder name to something else, use the switch /GN.

Outlook Switches:

Various switches control behavior when converting to Outlook:

/D1: Inserts the email address into the display name field

/CREMPTY: Create output folders even if there are no messages

/D12: When creating distribution lists (dlist) in the Contacts folder, usually each entry of the dlist is also created as a normal contact. This switch disables that and dlist entries will only appear in the dlist.

/D17: Do not create distribution lists in the Contacts folder

/CF <value>: Change the default name of the Contacts folder

/CAF <value>: Change the default name of the Calendar folder.

/CAT <value>: Change the default name of the Tasks folder.

/SKIP <value>: Ignore given folder name when building internal table of folders. Usually used with "Public Folders" to avoid a long login time and skip public folders.

Lotus Notes Switches:

The following switches affect behavior when importing/exporting Lotus Notes:

/EXRTF: Transend Migrator will attempt to convert embedded objects when converting from Lotus Notes to Microsoft Exchange.

/USEADDR: will set the distribution list and sender addresses in the form "Display Name" instead of just display name.

/EXALL: causes Transend Migrator to ignore "All Documents" and "Discussion Threads" when exporting folders. Useful in batch mode when Convert=* is specified.

/NOGROUPS: ignore distribution lists when exporting address books

/EXRTF: export message text as an RTF document attachment

/D9: When exporting calendar, get the message body from the "Subject" field.

/D14: When exporting address book, get email address from the "ShortName" field.

/D15: When exporting address book, get email address from the "Internet Address" field.

RUNNING TRANSEND MIGRATOR IN BATCH MODE

Transend Migrator has a batch mode processor that allows you to perform multiple conversions with no user input. This is done by running the program TMB.EXE. TMB by default looks to the file UAB.DAT for its script. You may also supply a different file name.

A script consists of various keywords that supply the same information that is collected by the user interface. When all the required information is present, you trigger a conversion by using the keyword "Start". TMB performs the requested conversion, and then returns to processing the script. If additional data is found, the process begins again. You can have multiple sections in the the .DAT file, each with its own "Start", to convert messages, address books, calendars and tasks in a single process. The UAB.DAT file that is supplied with Transend Migrator can be used as a starting point for your own script.

Transend Migrator includes another program called the Batch File Creator. This tool simplifies the creation of the batch file and DAT file(s). See the Transend Migrator help file for details.

RUNNING TRANSEND MIGRATOR FROM A CENTRAL LOCATION

While Transend Migrator is a client level tool, it can be run from a centralized location, without any user intervention. It can be run in an interactive or batch mode. Batch mode can be used to significantly automate the migration process as described above. A single batch mode script (.dat file) can be created for multiple users, which would enable the conversion of groups of users in a single process; however, a single DAT file for each user is recommended.

For centralized operation, access to the Domino server and/or Exchange server may or may not be required, depending on the location of the Notes data and the desired target for the Outlook/Exchange data. Access is required to the user's Notes email and calendar files (typically stored on a server) and their local names.nsf file for address books (typically stored on each user's C drive). If there are local copies of the users' Notes .nsf email files, then access to the Notes server will not be required.

Notes data can be converted to the user's Exchange server mailbox or .pst file (one for each user). If converting to a .pst file, access to the Exchange server is not required. The .pst file can be existing or Transend Migrator can create it on the fly. Many organizations prefer converting to .pst files so the new Exchange server doesn't get filled up with old data. When converting directly to the user's Exchange server mailbox, either the user's Outlook/Exchange profile name is required or just the Exchange username and servername, assuming the user has logged into the Exchange server as the administrator.

If Transend Migrator (either tm.exe or tmb.exe) is run on the Domino server, then the user has access to all the .nsf files on the server without any usernames or passwords. Therefore, a simple batch process could be set up to convert all Notes data to .pst files or Exchange mailboxes. On the Notes side, just specify in the .DAT file with the "FromDataBase=" keyword the path (including drive letter) to the .nsf file (e.g. FromDataBase= user.nsf). On the Exchange/Outlook side, the .DAT file keyword "ToDataBase=" can be set to the name of a PST file to open/create. For migration directly to the Exchange server mailbox, the "ToUserId=" keyword would be set to the Exchange username and the "ToDataBase=" keyword would be set to the name of the Exchange server (assuming the user has logged into the Exchange server as the administrator).

Review Transend Migrator's help file under Batch Mode Operation and Batch File Creator for more information.

CUSTOMIZATION

While the standard version of Transend Migrator meets a wide variety of conversion requirements, Transend is pleased to work with IT organizations to tune Transend Migrator if modifications are necessary for a particular environment or needs. For large scale migrations, for example, it may be desirable to modify defaults or assist in the development of a wrapper that draws on Transend Migrator's batch mode processor to fully automate the migration process. Or, it may be desirable to modify the GUI and provide defaults that conform to a particular migration process and environment. Transend has extensive experience working with IT departments around the world in such efforts.

FOR MORE INFORMATION

This document is intended to provide an overview as well as some specific information regarding using Transend Migrator for a Lotus Notes to Outlook/Exchange migration.

Transend Migrator is a utility for converting between a wide variety of email systems, including Lotus Notes, Microsoft Outlook/Exchange, Novel GroupWise, Netscape, Eudora, IMAP and more. For additional information, please contact:

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